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What Did the Editor of Science Say?

Another House Hearing on Suppressed Fraud Study

The House Science and Technology Committee took its turn May 14 in hearing the saga of the 2 researchers who have been trying for nearly 3 years to publish a highly praised, damning analysis of scientific trash that has appeared in mainstream scientific journals. Under libel threats from authors of several of the criticized papers, the analysis remains in limbo.

The hearing, before the Committee's Science Policy Task Force, produced little beyond what was reported in SGR of March 15 and April 1 concerning the travails of the authors of the analysis, Ned Feder and Walter W. Stewart, both of the National Institutes of Health. But it did bring out their account of a lamentable conversation with Daniel E. Koshland Jr., editor of *Science,* weekly journal of the American Association for the Advancement of Science.

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Cuts in Federal Labs Assailed—Page 8

In a prepared statement for the hearing, Stewart and Feder said that Koshland "told us, during a telephone conversation in which he indicated our report was unsuitable for publication in his journal, that *Science* would be giving less coverage to scientific misconduct in the future than it has in the past." The conversation reportedly took place February 12, 1985, 6 weeks after Koshland was installed as editor. (*Science,* incidentally, was not the place of publication of any of the papers criticized by Stewart and Feder.)

The words attributed to Koshland, which the committee did not pursue, are of interest because, following publicized reports in recent years of faked research achieving publication in respected journals, some of the mandarins of science have argued that the profession should refrain from public discussion of its internal problems.

The printed record more than fulfills the prophecy of "less coverage" that Stewart and Feder attributed to Koshland. As of May 30, *Science's* news columns have carried no mention at all of the Stewart-Feder affair, though elsewhere, it has received a fair amount of press attention over the past several months. The first Congressional hearing concerning the suppression of their paper took place February 26 before a House Judiciary Subcommittee, and brought out an extraordinary tale of libel lawyers in the peer-review process. *Science* ignored that proceeding as well as the May 14 hearing before the Science and Technology Task Force.

In contrast, the *New York Times* considered the controversy surrounding the unpublished paper worthy of an unusually lengthy report—some 2500 words on April 22. *Nature,* which has off-and-on been considering publication of the Stewart-Feder paper, reported the House Judiciary hearing on March 6, and the *Chronicle of Higher Education* reported the case at length on May 21.

Curious about the omission in *Science's* normally alert attention to science-policy affairs in Washington, SGR telephoned Koshland on May 15, and was rewarded with a bizarre conversation. "I don't comment in general on papers we reject," said the *Science* editor.

SGR then asked him whether he would comment, not on the rejected paper, but on the accuracy of the Stew-

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In Brief

University-based researchers have responded with an avalanche of proposals for the Pentagon's new program for putting money into academic laboratories, the University Research Initiative, according to DoD officials. With $90 million available this year, 963 applications, seeking a one-year total of $1.3 billion, have been received from 175 universities.

The Scientist, *the national newspaper of science long planned by Eugene Garfield, President of the Institute for Scientific Information, is staffing up (SGR Vol. XV, No. 19). But the previously announced starting date of late summer or fall has slipped again. It's now placed around the end of the year.*

The Howard Hughes Medical Institute, that mighty and growing financial power in biomedical research, has announced a new package of awards totaling $60 million for research in structural biology at 6 universities. The money, says a Hughes announcement, is "an addition" to plans announced in February for awards totaling "at least $1 billion over the next 5 years." Recipients of the new awards are Hughes laboratories at Baylor College of Medicine, Columbia Physicians and Surgeons, U. of Texas Health Science Center at Dallas, Harvard Medical School, UC San Francisco, and Yale.

Further Praise for the Unpublished Research

Patricia Woolf, a lecturer in sociology at Princeton University, was the only witness besides Walter W. Stewart and Ned Feder who testified at the May 14 House Science and Technology hearing on the issue of scientific misconduct raised in their paper. Woolf, whose testimony was invited by the Committee, has been studying scientific fraud and the role of editors in the control of research and publication. Following are excerpts from her testimony.

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[The Stewart-Feder paper] is an original, thoughtful, and serious contribution to an important discussion. If it is accurate and representative, it clearly suggests that some reforms of research and publication practices are needed. Although serious questions have been raised about both the style and the substance of the manuscript, I believe that the processes of peer review, if allowed to function normally, were and are adequate to assess the potential value of the manuscript. Furthermore, science and the public would have been better served if these processes had been allowed to evaluate the research without the distorting effects of potential libel action . . . .

Does the Feder-Stewart paper indicate that there is something seriously wrong in American research? First, let me say that I believe their paper to be a conscientious attempt to answer a difficult question that most scientists and policymakers are interested in and most sociologists of science have found so difficult that they have not even tried to answer it. That question is: "How prevalent is misconduct in scientific research and publication?" When asked whether disclosed cases of fraud are "the tip of the iceberg," sociologists shrug and reply that statistics of all kinds of deviant behavior are notably difficult to come by. The Feder-Stewart paper is a serious critique of American science.

If the account is accurate, it should be a matter of grave concern to scientists themselves and to federal agencies that fund science . . . . Unfortunately, the best forum for determining its validity, publication in a scientific journal, has been effectively foreclosed by the spectre of litigation . . . .

There are some reasons to be confident about the substantial value of the manuscript. In the time-honored tradition, its authors circulated the manuscript to others who could evaluate it from many intellectual vantage points. These included biomedical scientists, clinical and basic researchers, sociologists, and students of science policy, some of them members of the National Academy of Sciences. Many of these readers offered criticisms and corrections which were incorporated into the current version of the paper. I believe that Feder and Stewart conscientiously sought qualified external opinion and revised their manuscript in response to criticism . . . .

The manuscript was tentatively accepted by [*Nature*] . . . . Its editor had solicited and received detailed criticism. He also received a letter from a lawyer representing an author whose work was criticized in the Feder-Stewart paper. This letter said the article was "clearly defamatory" . . . . After several postponements of the publication date, Feder and Stewart withdrew the manuscript. It was submitted to [*Cell* and then withdrawn following renewed warnings of libel action] . . . .

In my opinion, any reasonable person who read the exchange of correspondence between the parties would come to the conclusion that fear of libel action was an important factor in the journals' decision processes about publication of the Feder-Stewart manuscript.

. . . *Science Editor Offers "Off the Record" Discussion*

(Continued from page 1)

art-Feder statement in Congress concerning their conversation. Koshland responded that he would "discuss it off the record." SGR declined, and pointed out to Koshland that his alleged statement of "less coverage to scientific misconduct" raised questions about the integrity of his journal and that he ought to give a straight answer. To which Koshland replied: "You know that fraud is a complicated subject."

Koshland then invited SGR to "submit your questions in writing." We again asked him to answer the question "Is it your intention to give less coverage to scientific misconduct in the future than in the past?" Replied Koshland: "You write to me and I will give you an answer." End of conversation. No letter to follow.

Koshland's treatment of the Stewart-Feder paper as a candidate for publication in *Science* provides a vignette of editorial hubris. The analysis they prepared focuses on some 100 research papers which John Darsee, a confessed data faker, co-authored with researchers at Harvard Medical School and the Emory University School of Medicine. Darsee, working at Harvard when he was exposed in 1981, was drummed out of science and many of the papers bearing his name were formally withdrawn from the scientific literature.

Stewart and Feder started with the assumption that Darsee, once a highly regarded, fast-rising young re-

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Acting Chief Quits White House Science Office

The vital signs of the White House Office of Science and Technology Policy (OSTP) were difficult to detect last week as John P. McTague, Acting Director since January 1, left for a job with industry—to be replaced by another Acting Director. Reports immediately circulated of a renewed effort by White House recruiters to get a full-fledged appointee for the job, but there have been many such reports over the past 7 months.

OSTP's new acting chief, who doubles as presidential Science Adviser, is Richard G. Johnson, a physicist who joined OSTP in 1983 after 27 years with Lockheed, where he once headed the Space Science Laboratory. Johnson had been serving as OSTP's Assistant Director for Space Science and Technology.

McTague, who succeeded George A. Keyworth II, is going to the Ford Motor Company to become Executive Director of Research. At Ford, he replaces W. Dale Compton, who's now a Senior Fellow at the National Academy of Engineering.

Meanwhile, the rumor mill was offering up several possible candidates for the science post. They include Dixy Lee Ray, former Governor of Washington and occupant of several high-level research-related posts in the Nixon and Ford Administrations; William R. Graham, Acting Administrator of NASA until James Fletcher's appointment, and Robert O. Hunter Jr., President of the Western Research Corportion.

Ray is reported to be the only one putting on a high-pressure campaign to get the job, and is said to have mustered the support of Defense Secretary Caspar Weinberger and National Security Adviser John M. Poindexter. Regarding Ray's chances, some doubt was expressed as to whether her ebullient and outspoken style would be acceptable to the White House Chief of State, former Marine Colonel Donald Regan. "Loose-cannon-on-the-deck problem," said one observer.

But, in the opinion of one veteran of White House science affairs, Ray might get the appointment simply on the grounds that she alone among the prospects is keen for it. That's a a novelty for the recruiters who, off and on since late last year, have had no success in getting a favorable response from several industrial research executives whom they approached. Various reasons account for the lack of interest, but one of them is that since Don Regan became Ronald Reagan's Chief of Staff, OSTP, never high in the White House hierarchy, has sunk even lower.

The White House's budget plans for next year call for reducing OSTP's spending to $1.6 million, a cut of $646,000 from this year's level. Losses of office space and staff would accompany that reduction. Furthermore, it's been noted around science-policy circles in Washington that OSTP has played no visible, and probably no invisible, role in 2 great high-tech episodes that would seem to call for a Science Adviser at the presidential elbow: the Challenger investigation and the monitoring of the Chernobyl disaster.

OSTP's most conspicuous achievement in recent months was the release of a report on federal-university relations, *A Renewed Partnership*, prepared by a White House Science Council panel chaired by David Packard and D. Allan Bromley. (See In Print, P. 7). The report,

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Science *(continued from page 2)*

searcher, put one over on his co-authors in faking data. But Stewart and Feder went beyond that subject to examine the co-authored papers on the altogether separate issue of whether they made sense to a scientifically trained person. Their conclusion on this distinct matter was that many of the papers contained conspicuous flaws. Nonetheless, co-authors had signed on, thus leaving questions of whether they actually had read the papers.

In rejecting the Stewart-Feder paper early last year, Koshland cited space limitation (fair enough, given a length then of 48 typed pages). But he also stated that *Science* had already covered the Darsee affair, which was true but irrelevent, since the Stewart-Feder paper was concerned not with Darsee's sins, but with the publishing practices of Darsee's former colleagues.

In July 1985, following submission of a shortened version, Koshland rejected the paper again, writing to Stewart and Feder, "I do not concur with you that the details of this case are important or that they will affect public policy on fraud."—DSG

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Editor and Publisher
Daniel S. Greenberg

Associate Publisher
Wanda J. Reif

Contributing Correspondents
Francois Seguier (Paris); Ros Herman (London)

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Drive Begins to Rebuild R&D Advisory Role

The doubtful condition of the White House Office of Science and Technology Policy has brought the first sign of a restoration drive—a *New York Times* op-ed piece in which 2 elder statesmen of the sciences argue for "a scientific advisory system that has sufficient independence and prestige to give advice that is politically unpalatable."

The plea, published May 17, was sounded by Hans Bethe and John Bardeen, both Nobel laureates and alumni of the President's Science Advisory Committee, that nostalgia-shrouded body which was attached to the White House Science Office until Richard Nixon petulantly wiped out the whole apparatus in 1972. A mythology of vast influence has grown up about the university-dominated Committee, which was founded by Eisenhower to help cool the Sputnik panic. But what usually gets left out is that while the Committee existed, many of its members and associated staff support anguished that the White House often didn't listen to them.

Keying their arguing to what they consider poor or non-existent presidential advising on the Strategic Defense Initiative, Bethe and Bardeen wrote that the President's March 1983 Star Wars speech "was prepared without consultation with experts in the Pentagon or his own science adviser, George Keyworth, until only a few days before the speech was given." To avoid a repetition, they suggested, Reagan needs something like the old Committee on which they served.

After Nixon demolished on-board presidential science advice, the establishment—keen for its own place in the White House—put on a major comeback effort. It included a dour report by the National Academy of Sciences that informed the President of his urgent advisory needs, as well as hearings before Congressional committees that derive some glory from having a presidential science adviser to summon as a witness.

However, the essential truth about presidential science advising has often been stated by past advisers, including Keyworth, who served the Reagan Administration for over 4 years: Neither advisers nor advice can be imposed on presidents who don't want them. Furthermore, presidents don't want unpalatable advice. Sorry, but that's the way it is.

. . . It's Been Downhill for OSTP Without Meese Connection

(Continued from page 3)

in the works for 2 years, came out in summary form many months ago. The final version was unveiled at a hearing before the House Science and Technology Committee on May 15, with Packard and Bromley as the star witnesses. The aim was to achieve some attention for the panel's plea for more money and less red tape in federal relations with academic science. But the proceedings aroused little attention.

OSTP has been in a slow decline ever since Presidential Counselor Edwin Meese became Attorney General last year and left Keyworth without a friendly link to Reagan. Keyworth, who has publicly lauded Meese as his mentor and ideological soul mate, started looking around for new work after he became acquainted with Don Regan's style of operation. Announcing in late November that he would be leaving January 1 to set up a consulting business in Washington, Keyworth provided the White House with a reasonable period for hiring a successor. But no one who was sought out wanted it.

Presidential-staff recruiting being a delicate game, the offer is made in terms of would you accept if you were asked? Therefore, no one can claim to have turned down an offer. It said that such feelers were sent out to Roland W. Schmitt, GE Vice President for Corporate Technology, and Ralph Gomory, IBM's chief of research, plus several others. One of them said he would accept if the invitation came directly from the President and the post was elevated to cabinet status. There was no reply.

With the job still unfilled on January 1, McTague, a physical chemist who had been OSTP's Deputy Director since 1983, was appointed Acting Director. His departure came suddenly and without any official announcement. Last week, rumors circulated that he had told the White House that he would leave on May 23. Inquiries to his office brought off-the-record confirmation and a request that official word be sought from the White House, which had not issued an announcement. The afternoon before McTague's departure, the White House designated Johnson as Acting Director.

NAS Forms Computer Board

Joseph F. Traub, Chairman of the Computer Science Department at Columbia University, has been appointed Chairman of the National Academy of Sciences' newly created Computer Science and Technology Board. The membership, totaling 18, is drawn from universities and computer firms. The Board will conduct studies on various issues, including international competitiveness, manpower development, use of supercomputers, and software production.

France: New Government Not So Keen for R&D

Paris. Disbelief fills the French scientific community. Contrary to all forecasts—contrary to common sense, in the view of the mandarins of research—science and technology are not among the new government's highest priorities. Everyone had expected that whatever the outcome of the national election that was held in March, the Socialist commitment to steady growth for R&D would surely survive as an essential ingredient of economic strategy. But the new conservative government, led by Prime Minister Jacques Chirac, has decided otherwise.

The civilian R&D budget for this year is to be cut by about $140 million. The reduction amounts to 5 percent, which ordinarily would not seem too horrendous, but given the neglect that French science experienced prior to the arrival of the Mitterrand Socialists in 1981, the turnabout has caused considerable alarm in scientific circles. Why has R&D, now so sacred to the economic planning of many nations, been cut in France?

Farmers Need the Money

The answer is that science must help pay for the promises that the former opposition party made to gain office. Among the conservative voters who brought the Right to power, farmers played an important part. The first step taken by the new government was a stabilization of agricultural revenues. And, since European agriculture survives on subsidies, the money had to come from other beneficiaries of the central treasury. Science and innovative industry were first to be sacrificed.

The ideology and culture of the members of the Chirac government are not favorable to R&D, as can be seen by looking back a bit in recent French political history. Chirac's party, which has filled the main positions in the new government, has its roots in the presidency of Georges Pompidou, who held power from 1969 to 1974. It was during the reign of Pompidou, who was a literature professor, art devotee, and banker, that research in France experienced its darkest financial and political hours.

The situation improved somewhat during the 1974-81 presidency of Giscard d'Estaing, but healthy growth did not take place until the Socialists came to power in 1981—strongly committed to the creation of a flourishing national scientific enterprise. The Chirac crowd resembles that of Pompidou's. It is filled with lawyers, academics, and bankers. They more or less all come from the same elite school, the National School of Administration, renowned for values that are not favorable to scientific research or even to industry.

Unkind spirits perceive a certain amount of vengefulness in the government's attitude toward researchers, especially the many on the left. The first sign was emphatic and early: the elimination of the Ministry of Research and Technology. As the ax was falling, the head of the Ministry, Herbert Curien, an eminent crystallographer who managed the development of the highly successful Ariane rocket, ran to President Mitterrand to seek a reprieve for his organization. But to no avail. The Socialist President Mitterrand had more urgent problems than research management in trying to organize "cohabitation" with a Rightist government.

Nonetheless, government-supported civilian research remains a sizable endeavor, and therefore must be assigned some place on the government's organizational tables. A place has been found. It is in the Ministry of Education, whose head, Rene Monory, has said he's happy to be host. His Ministry, he said, is "the ministry of the future," and its task is to "guarantee coherence of action from nursery school to the Ariane"—an interesting spectrum, in view of Curien's role in French space history.

Doubts about the new arrangement exist among the heads of the laboratories that now find themselves linked to the Ministry of Education. History has proven that the budget for research is less well defended when it is attached to education, as opposed to when it is independent or linked to industry. Education Minister Monory does have a senior associate for research, Alain Devaquet, but Devaquet got no place in attempting to mobilize political support against the budget reductions.

Organizational Shuffle

As a former chemistry teacher, Devaquet is acquainted with the world of science, and therefore must understand the financial needs and anxieties of the research community. But, with the Ministry of Finance decreeing spending cuts, Devaquet seems to be focusing his attention on the attainable, rather than the impossible, which means that he is devoting himself to organizational changes.

In this role, Devaquet possesses considerable power, for, in effect, he has been given the leadership of the National Center for Scientific Research (CNRS), the main agency for basic research in France. With a budget of $900 million and a network of government-owned and operated laboratories throughout France, CNRS employs 10,000 researchers, 15,000 support personnel, and absorbs 20 percent of all government funds for R&D. It is a fat target for the anti-government government that now sits in Paris.

(Continued on page 6)

. . . Pressure for Industry to Finance Research

(Continued from page 5)

The cutback mood is reminiscent of the assault that the Reagan Administration has led against the national laboratories in the US, but it differs in one important respect. The Reaganites argue for redeploying national lab funds to university-based research. The aim of the new French government goes no further than simply holding down spending.

Traditionally, CNRS has been stable—some would say immovable—but that may change. During the election campaign and in the months since, CNRS has been the object of repeated attacks from within Prime Minister Chirac's party and by a rightist union of university professors. The professors are asking for a law that will "put an end to bureaucratic concentration and the unionist movement, which are damaging the reputation and independence of French science."

The campaign platform of Chirac's party stated that large numbers of CNRS researchers should be transferred to institutions of higher education, a move that would diminish the political visibility of science and very likely reduce support for basic research. Legislation to effect this transfer is being prepared by the Ministry of Education, but details of the CNRS change have not been made public.

Cut in Computer Support

One often hears in France that knives must be sharpened to make cuts in basic-research budgets. It is also said that CNRS researchers do not really stand up very well in international comparisons, and that a lot of the work they do is scientifically inconsequential and commercially useless.

Along with this, there's a good deal of talk about the importance of industry getting deeper into research with its own funds—a theme that was quite popular during the presidency of Giscard d'Estaing. The new Minister of Industry (which also includes Mails, Telecommunications, and Tourism), Alain Madelin, has proposed the elimination of certain subsidies to innovation-oriented enterprises. R&D in the electronics industry, which is by no means robust, has just been cut by $50 million. The reduction came as the industry was gearing up for ambitious programs proclaimed in the closing period of the Socialist government.

The rich Ministry of Mails and Telecommunications has been told not to pump money into the computer and information industries. But where will they obtain capital for the development work that is needed for France to overcome its substantial industrial backwardness in these fields? Must they go to the military?

At the moment, perplexity reigns, both in the academic and industrial worlds. Official data are rarely available. In France's new political situation, where a President of the Left shares power with a government of the Right, the old ideological signposts no longer are relevant for planning action.

However, there is a bright spot. In a recent poll taken by a teenage magazine in collaboration with CNRS, 48 percent of those between ages 10 and 15 saw researchers as men of action; only 16 percent regarded them as dreamers. And 64 percent of the youths said researchers were benefactors of humanity. This should be a matter of serious reflection for the "Minister of the Future."—FS

Fuqua to Yield Chairmanship For Shuttle Disaster Hearing

Chairman Don Fuqua (D-Fla.) has informed his fellow members on the House Science and Technology Committee that he will not, after all, chair the Committee's hearings on the Challenger disaster.

The assignment, he stated May 16 in a memo to Committee members, will be taken by Rep. Robert A. Roe (D-NJ), the ranking Democrat on the Committee, who's in line to succeed to the S&T chairmanship when Fuqua retires at the end of this session. But Fuqua noted that, apart from the shuttle hearings, he will retain his role as Chairman of the full Committee for the remainder of his term.

The reason offered by Fuqua for stepping aside for the shuttle hearings is that "follow-through activities will carry over into the next Congress, in which I shall not serve." In the memo, Fuqua noted that he had previously announced that upon leaving Congress, he will become President of the Aerospace Industries Association, the Washington-based lobbying organization that encompasses virtually every major federal aerospace contractor. But Fuqua merely mentioned the coming job move, without citing muttered concerns by his Committee colleagues and others about a conflict of interest between his present and forthcoming employment (SGR Vol. XVI, No. 9).

Fuqua insists there is no conflict, since his Committee, which writes authorizing legislation for NASA, does not award contracts or deal directly with industrial firms. But he says he has asked the Committee Counsel to maintain a lookout for conflicts.

The hearings, at which members of the Rogers Commission will testify, are tentatively scheduled to begin on June 10 or 11 and will run for about 8 days, including 3 days set aside for testimony from NASA officials, plus private citizens who want to say something about the shuttle disaster.

In Print: SDI, SATs, Nobel Prizes, and More

Publications concerning science and technology policy have recently been issued by the following organizations and are available from the indicated addresses (not from SGR):

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Office of Science and Technology Policy, Executive Office of the President, Washington, DC 20506; tel. 202/395-3840:

A Renewed Partnership (53 pages, no charge), report of the White House Science Council Panel on the Health of US Colleges and Universities, chaired by David Packard, Chairman of Hewlett-Packard, and D. Allan Bromley, Professor of Physics, Yale. Commissioned 2 years ago by then-White House Science Adviser George A. Keyworth II, this study, with influential David Packard as co-chairman, was aimed at shaking loose substantially greater federal support for academic science, along with less onerous rules for using the money. The report couldn't be more responsive to the yearnings of academic science. It calls for a shift of development funds to basic research, a strategy that would regard university science as an investment, rather than procurement, lengthier periods of grant support, new overhead payment regulations favorable to universities, and federally financed 4-year "merit-based, portable scholarships . . . for the most able 1 percent" of freshmen in mathematics, engineering, and the natural sciences.

The main point to be noted about the Packard-Bromley Report is that it was basically written before the passage of Gramm-Rudman-Hollings.

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Congressional Budget Office, 2d and D Sts. SW, Washington, DC 20515; tel. 202/226-2621:

Trends in Educational Achievement (165 pages, no charge), prepared at the request of the Subcommittee on Education, Arts, and Humanities of the Senate Committee on Labor and Human Resources, notes that scholastic test scores inexplicably started making a comeback with children entering school in the late 1960s, and that the improvements have continued grade by grade. "This pattern," says the CBO report, "however, has gained relatively little attention," nor has it be widely noted that "achievement in the elementary grades is now by some measures at its highest level in 3 decades." The score gains, interestingly, occurred prior to the current wave of school-reform programs.

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Science Policy Research Division, Congressional Research Service, Library of Congress, Washington, DC 20540, attn: Joan D. Winston; tel. 202/287-5700:

The Nobel Prize Awards in Science as a Measure of National Strength in Science (19 pages, no charge). Prepared for the Science Policy Task Force of the House Science and Technology Committee, this study of the 229 Nobel science awards between 1945 and 1985 duly notes that the Nobels, coming decades after the winning work, provide no measure of current scientific strength. The study does clear up a widely held misconception—that the US has reaped Nobel glory for work done abroad by immigrant scientists. "Nearly one-third of the 114 Nobel laureates honored since 1945 while US citizens were born overseas," it states. "However, 111 of the 114 . . . did their prize-winning work in the United States, and 79 percent of them did their graduate education here. Contrary to popular perception, only 7 of the 114 US-citizen winners since 1945 were born in Germany, and all 7 did their prize-winning research in the US."

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Office of Technology Assessment, Publishing Office, US Congress, Washington, DC 20510; tel. 202/224-8996:

List of Publications (54 pages, no charge), names some 350 large and small publications OTA has produced for Congressional committees, and tells how to order copies.

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Strategic Defense Initiative Library, 5111 Leesburg Pike, Suite 300, Falls Church, Va. 22041; tel. 703/845-3591.

Bibliography of Unclassified Reports (78 pages) and *Bibliography of Unclassified Books* (10 pages, no charge for either). The library, established in March 1985, is operated for SDI by the Institute for Defense Analyses.

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Gale Research Co., Book Tower, Detroit, Michigan, 48226; tel. 313/961-2242:

International Research Centers Directory 1986-87 (1110 pages, $310), lists 4200 research-related organizations in 130 countries, with addresses, names of officials, descriptions of programs, size of staff, library facilities, etc.

Navy Nobelist Hits Neglect of Government Labs

While university administrators push plans for plundering federal lab budgets for the benefit of academic science, government-employed researchers have generally had little opportunity to respond. But a chance came last month when the House Science and Technology Committee's Science Policy Task Force invited in the latest crop of American Nobel prize winners to hear their views on national science policy.

Jerome Karle, of the US Naval Research Laboratory, the 1985 Nobel laureate in chemistry, directly addressed the issue of government labs. "All aspects of scientific and technical effort, academic, federal and industrial, should be kept strong," he said, "and tendencies that weaken any of them are highly undesirable. I must say that several federal laboratories with which I am familiar have seen a better day in terms of personnel morale, productivity, and resources for conducting creative research."

"When I joined the Naval Research Laboratory," Karle continued, "there was a strong desire among the leaders of the laboratory to achieve very high standards in creative research. I believe that they succeeded in many areas. They summarized their philosophy in a simple, straighforward statement: 'Find a good person and support him (her).'"

"It is my perception," Karle testified, "that the dedication of the leadership at the Naval Research Laboratory, and undoubtedly other federal laboratories, to the achievement of very high levels of creative research continues. The constraints imposed on federal laboratories in recent years, however, appear to make it more difficult to accomplish such goals."

Earlier in his testimony, Karle said he had the "perception, largely from my contacts with numerous colleagues, that the quality of the working environment in various government laboratories has diminished in recent years," adding that "In the well-motivated attempt to enhance the quality of performance, especially among the marginal performers in the federal government, personnel administrative and evaluation techniques have been developed that are not well-attuned to the motivations of creative scientists or the manner in which scientific research progresses . . . .

"One of the implications which is especially rankling," Karle said, "is the implication that dedicated research scientists are motivated to improve their efforts or do their best work because it may give rise to a monetary bonus at the end of the year. Badly designed administrative systems can eventually distill from an organization the best people and leave those who are more or less attuned to the system. The residual personnel under such circumstances are not likely to be the scientifically most creative."

Fight Over, NIH Sets Up New National Arthritis Institute

Arthritis now has its own bastion at the National Institutes of Health, raising the number of institutes there to an even dozen, the first increase since 1974, when the National Institute on Aging was established.

Fulfilling legislation passed last year, following years of battling that pitted the arthritis lobby against the NIH management and the White House, the Department of Health and Human Resources has created the National Institute of Arthritis and Musculoskeletal and Skin Diseases. Lawrence E. Shulman, on the NIH staff for the past decade, has been named Acting Director.

The new institute was extracted from what was formerly known as the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases. The residue now becomes the Institute of Diabetes and Digestive and Kidney Diseases.

NIH finally yielded to the arthritis push after its pleas against institute proliferation appeared to gain attention on Capitol Hill. One sign of Congressional sympathy was in the turnabout on proposals to create a National Institute of Nursing. Also the object of long lobbying in Congress, the Institute of Nursing came close to passage on a number of occasions, but in the same bill that created a separate arthritis institute, the nursing proposal was downgraded to a National Center for Nursing Research. Doris H. Merritt, a physician who has been at NIH since 1978, has been named Acting Director of the Center.

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